

MEASURING PROBES, DIGITAL DISPLAYS AND BENCH TABLES

The Sylvac linear probes are based on the capacitive principle characterized by a high degree of accuracy also on long measuring ranges up to 50mm. The probes are used as measuring elements to be placed on tables, supports, bench tables, special mechanical devices or multi-gauging fixtures.

The probe signal is processed in a display unit. Sylvac offers several of them. Benefiting from the high degree of accuracy of its probes and with the aim to measure small machined parts typically used in watches, Sylvac developed a whole series of benches and tables. These supports are conceived for the control of internal, external, heights, grooves etc, starting from a few tenths to 70mm.

Absolute capacitive measuring system

Digital display units RS232 and USB

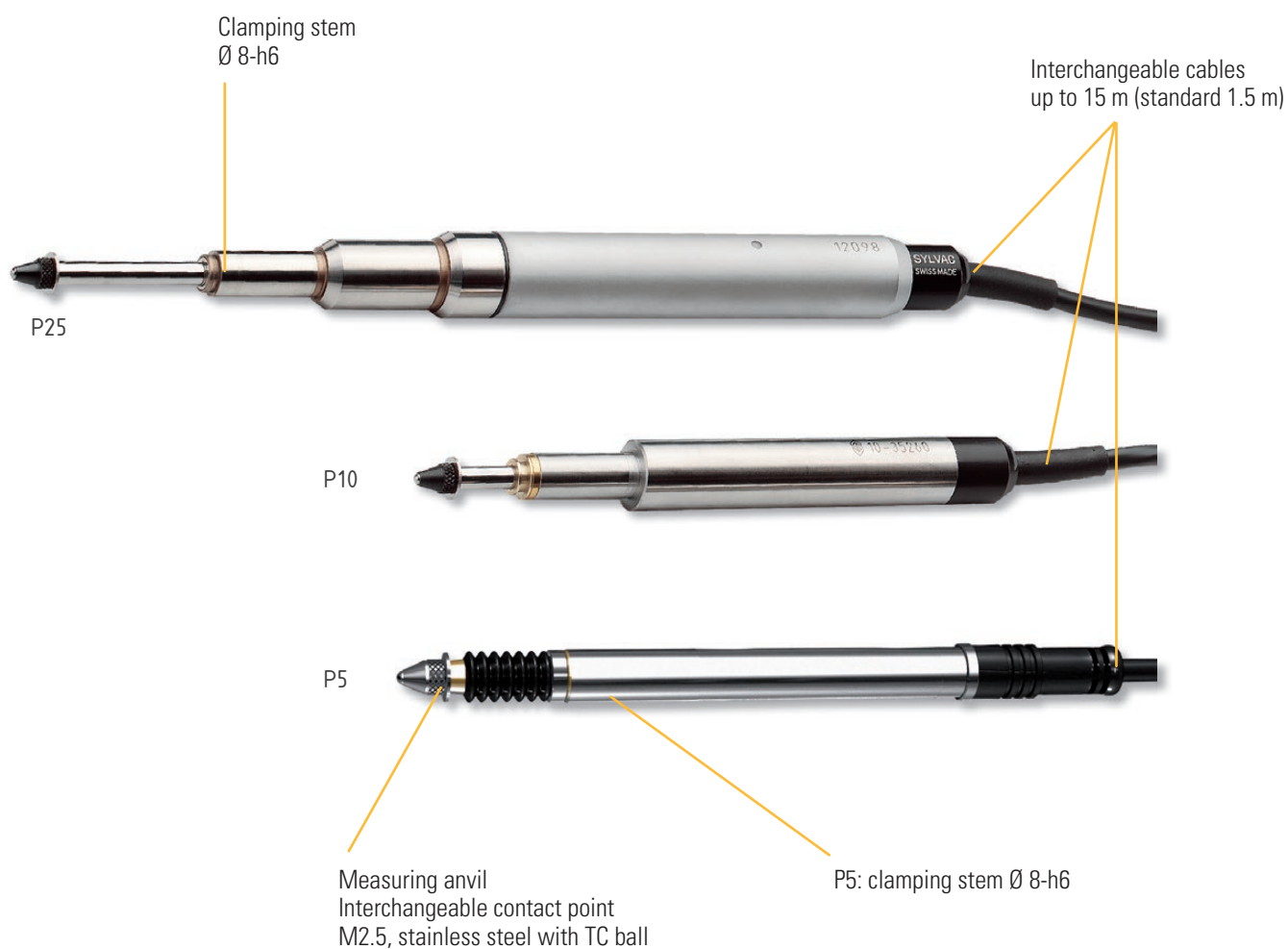
Operational temperature 0 to +50°C



Measuring probes

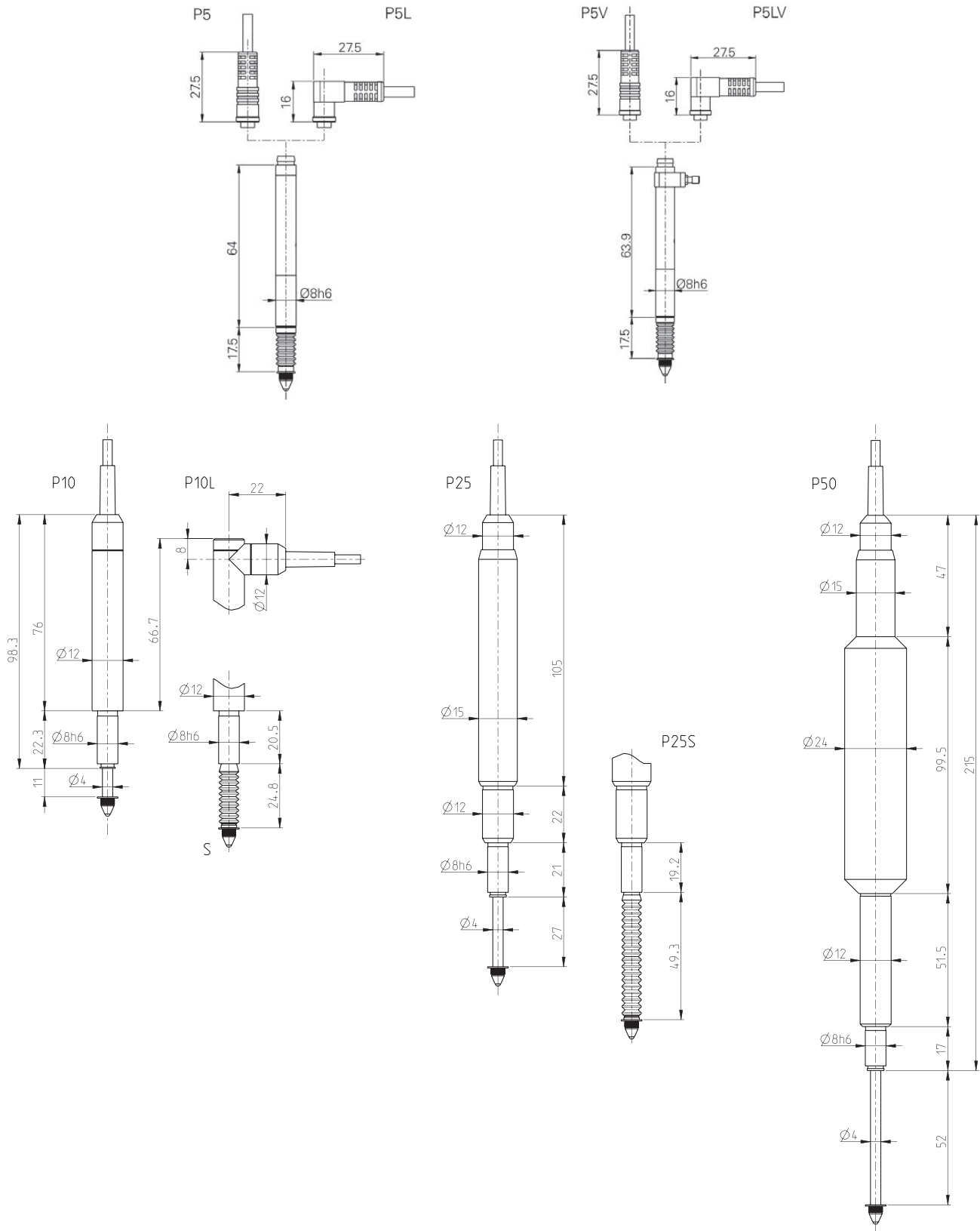
DESCRIPTION

- Capacitive absolute measuring probes, plunger type
- Resolution 0.0001 mm
- Measuring range from 5 to 50 mm
- Plain bearing or ball bearing, integrated vacuum lifter on P5
- Compatible with all Sylvac digital units
- Excellent linearity
- Interchangeable cables on most types



Measuring probes

DIMENSIONAL DRAWINGS



Measuring probes

LISTING OF ALL MODELS

| | 900.1001 P5 | 900.1001 P5BL | 900.1003 P5V | 900.1003 P5BVL | 900.1006 P5L | 900.1008 P5VL | 900.1010 P10 | 900.1012 P10S | 900.1014 P10L | 900.1016 P10LS | 900.1025 P25 | 900.1027 P25S | 900.1050 P50 |
|----------------------------------|-------------|---------------|--------------|----------------|--------------|---------------|--------------|---------------|---------------|----------------|--------------|---------------|--------------|
| RANGE | | | | | | | | | | | | | |
| 5 mm | • | • | • | | • | • | | | | | | | |
| 10 mm | | | | | | | • | • | • | • | | | |
| 25 mm | | | | | | | | | | | • | • | |
| 50 mm | | | | | | | | | | | | | • |
| EXECUTION | | | | | | | | | | | | | |
| Plain bearing | • | | • | | • | • | • | • | • | • | • | • | • |
| B- Ball bearing | | • | | • | | | | | | | | | |
| V- Vacuum lifter | | | • | • | | • | | | | | | | |
| L- 90 degrees cable | | • | | • | • | • | | | • | • | | | |
| S- with rubber boot | • | • | • | • | • | • | | • | | • | | • | |
| MECHANIC | | | | | | | | | | | | | |
| Diameter 8 mm h6 | • | • | • | • | • | • | • | • | • | • | • | • | • |
| Diameter 12 mm | | | | | | | | | | | • | • | • |
| Measuring anvil M2.5 | • | • | • | • | • | • | • | • | • | • | • | • | • |
| LIFTING | | | | | | | | | | | | | |
| Integrated | | | • | • | | • | | | | | | | |
| Separate accessories | • | • | | | • | | • | • | • | • | • | • | |
| PROTECTION IP | | | | | | | | | | | | | |
| Protection rating IP (IEC 60529) | 64 | 64 | 64 | 64 | 64 | 64 | 40 | 50 | 40 | 50 | 40 | 50 | 40 |

Measuring probes

TECHNICAL SPECIFICATIONS

| | | P5 | P10 | P25 | P50 |
|--------------------------|----|-----|-----|-----|------|
| Pre-travel | mm | 0.7 | 0.5 | 0.8 | 1 |
| Max. Error ¹⁾ | µm | 1 | 1 | 1.2 | 2.5 |
| Repeatability | µm | 0.2 | 0.2 | 0.2 | 0.4 |
| Moving mass | g | 3.7 | 4.1 | 9.6 | 15.3 |

¹⁾ With Master unit. See as well the specifications of the pair Measuring probe/display unit.

MEASURING FORCE

| | | P5 | P10 | P10S | P25 | P25S | P50 |
|-------------|---|-----------|-----------|-----------|-----------|----------|------------|
| Standard | N | 0.60-1.20 | 0.60-0.80 | 0.70-1.25 | 0.60-1.00 | 0.65-1.4 | 0.70 - 1.7 |
| Minimum | N | --- | < 0.10 | --- | < 0.15 | --- | --- |
| Low | N | 0.20-0.25 | 0.20-0.25 | --- | 0.20-0.30 | --- | --- |
| High | N | 1.00-1.80 | 0.70-1.50 | --- | 0.70-1.60 | --- | --- |
| Lateral max | N | 0.70 | 0.60 | --- | 0.30 | --- | 0.25 |

Tolerance $\pm 20\%$, measuring probe in vertical position, outgoing spindle.

BASIC INSTRUMENT

- Probe according to technical specifications
- Calibration certificate
- Cable 1.5 m
- Stainless steel contact point with tungsten carbide ball Ø 2 mm (905.2204)

Measuring probes

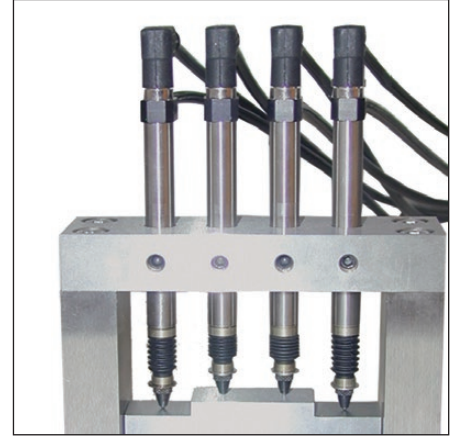
APPLICATIONS



P5 probes connected to a D302 coupled with D300S for OD, concentricity and cylindricity measurements



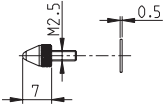
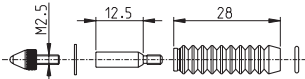
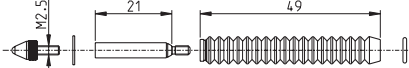
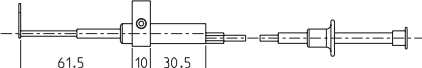
P5 probes connected to a D50S unit measuring the external diameter of a shaft



Combined probes for the measurement of several heights

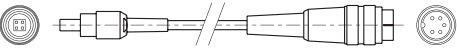
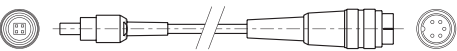
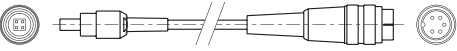
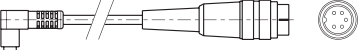
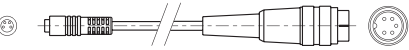
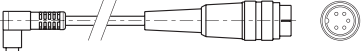
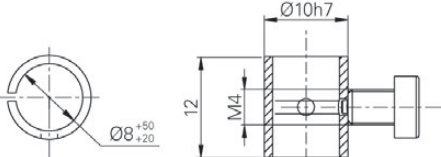
Measuring probes

ACCESSORIES

| | | P2 | P5 | P10 | P25 | P50 |
|---|-----------------|---|----|-----|-----|-----|
|  | 905.2204 | Stainless steel contact point M2.5 with TC ball probe (other contact points, see page 62) | | | | |
|  | 901.2003 | | | | | |
|  | 901.2004 | | | | | |
|  | 901.2005 | | | | | |
| | 901.2012 | | | | | |
| | 901.2013 | | | | | |
| | 901.2014 | | | | | |

Measuring probes

ACCESSORIES

| | | | P2 | P5 | P10 | P25 | P50 |
|---|-----------------|-------------------------|----|----|-----|-----|-----|
|  | 901.5002 | Cable 1.5 m | | | • | | |
|  | 901.5012 | Cable 1.5 m | | | | • | |
|  | 901.5022 | Cable 1.5 m | | | | | • |
|  | 901.5032 | Cable 1.5 m bent | | | • | | |
|  | 901.5042 | Cable 1.5 m | | • | | | |
|  | 901.5052 | Cable 1.5 m bent | | • | | | |
|  | 905.2231 | Adapting socket + screw | • | • | • | • | • |

Digital display

TABLE OF CORRESPONDENCES

| | | D50S | D50S PRO | D60S PRO | D80S | D200S | D300S *) | D302 | D302 a | D304 | D304 a |
|------------------|--------------------------------------|------|----------|-----------------|-----------------|------------------|------------------|----------------|----------------|----------------|----------------|
| Direct input | Probes | 2 | 2 | 1 | 1 | 8 | 2 (4) | 2 | 2 | 4 | 4 |
| | RS instruments | | | | 1 / - | | 1 / 6 | | | | |
| | External contact | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |
| Additional input | Probes | | | | 8 ¹⁾ | 24 ²⁾ | 30 ³⁾ | | | | |
| | USB instruments | | | | | | 30 ⁴⁾ | | | | |
| | Analog display | | | 1 ⁵⁾ | | | | | | | |
| Output | RS 232 | • | • | • | • | • | • | | | | |
| | RS 485 | | | | | | • | • | • | • | • |
| | USB | | | | | • | • | • | • | • | • |
| | Opto-coupled output | | | | | • | • | • | • | • | • |
| | Analogic | | | | | | | • | | | • |
| Functions | Direct zero setting | • | • | • | • | • | • | | | | |
| | Direct zero setting per channel | • | • | • | • | • | • | | | | |
| | Selection of resolution | • | • | • | • | • | • | | | | |
| | Selection of measuring direction | • | • | • | • | • | • | | | | |
| | PRESET | • | • | • | • | • | • | | | | |
| | Tolerance indicators | | | • ⁵⁾ | • | • | • | | | | |
| | Classification (max 8 classes) | | | | | | • | | | | |
| | Min, Max, Delta | | | • | • | • | • | | | | |
| | A ± B | • | • | | | • | • | | | | |
| | A ± B ± C | | | | | • | • | • [*] | • [*] | • [*] | • [*] |
| | Scanning | | | | | • | • | | | | |
| | Histogram | | | | | | • | | | | |
| | Statistics | | | | | | • | | | | |
| | Memorization | | | | | • | • | | | | |
| | Simultaneous display of the channels | | | | | • | • | | | | |
| | Dynamic measurement | | | | | • | | | | | |
| | Calibration (max. 25 points) | | • | • | | | • | • | • | • | • |

¹⁾ with unit (s) additional (s) D108

²⁾ with 3 D200S units

^{3)*} 30 probes with units D200S or maximum 32 with D302 / D304

^{4)*} with USB-Hub powered

⁵⁾ with analog display unit

* Maximum 62 mixed instruments on D300S

Digital display

S_View D50S

DESCRIPTION

- Digital display with 2 probe inputs
- Data output RS232C
- Power supply by external unit
- Light and compact
- Ease of use
- Correction of linearity on both channels (D50S PRO)

Resolution up to 0.0001 mm

Great clear and luminous display

Combination of channels A+B; A-B

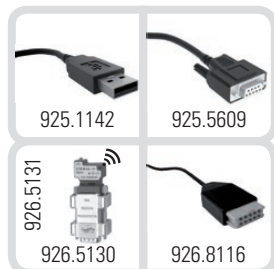


Direct functions

Feet



RS232



D50S PRO

Correction of linearity.
Higher precision

Digital display

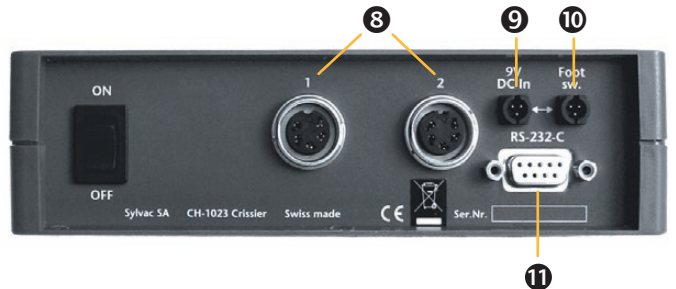
S_View D50S

DISPLAY

- ❶ Conversion mm/inch
- ❷ Selection of resolution
- ❸ Selection of measuring direction
- ❹ REL and ABS measurement
- ❺ PRESET function
- ❻ Data sending
- ❼ Selection of measuring mode: channel 1 ; channel 2 ; channel 1-2 ; channel 1+2



- ❽ Probe inputs
- ❾ Power supply connection
- ❿ External contact connection
- ⓫ RS232 input/output



TECHNICAL SPECIFICATIONS

| | | 804.1050 | 804.1060 |
|-----------------------------------|----|---|---|
| Type | | D50S | D50S PRO |
| Max. Error | μm | P2 : 1.5 / P5 : 1.6 / P10 : 1.6 / P25 : 1.9 / P50 : 3.9 | P2 : 0.5 / P5 : 0.6 / P10 : 0.6 / P25 : 0.8 / P50 : 1.5 |
| Repeatability | μm | P2 : 0.2 / P5 : 0.2 / P10 : 0.2 / P25 : 0.2 / P50 : 0.4 | P2 : 0.2 / P5 : 0.2 / P10 : 0.2 / P25 : 0.2 / P50 : 0.4 |
| Sizes | mm | 180 x 75 x 50 | 180 x 75 x 50 |
| Weight | kg | 0.3 | 0.3 |
| Case | | Terblend Plastic | Terblend Plastic |
| Protection according to IEC 60529 | | IP40 | IP40 |
| S_Connect | | RS232 ¹⁾ | RS232 ¹⁾ |
| Programmable by PC | | • | • |

¹⁾ see cables chapter

BASIC INSTRUMENT

- Unit according to technical specifications
- Feet (pair)
- Charging unit according to country (904.4000)
- Instruction manual

APPLICATIONS



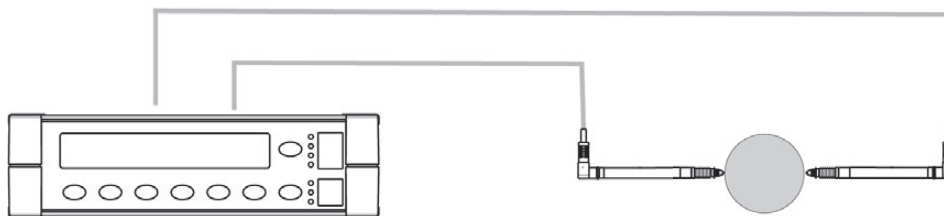
Measuring a shaft with 2 probes (A+B)



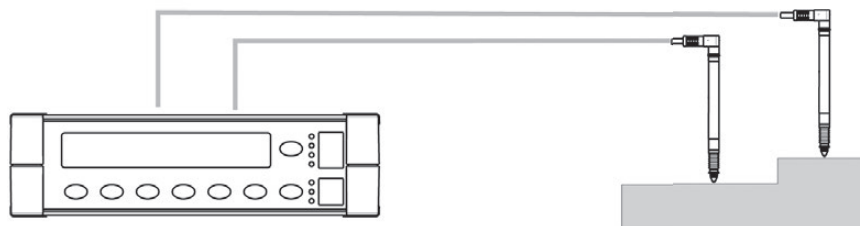
Simple measurement with one probe

COMBINATIONS OF PROBES

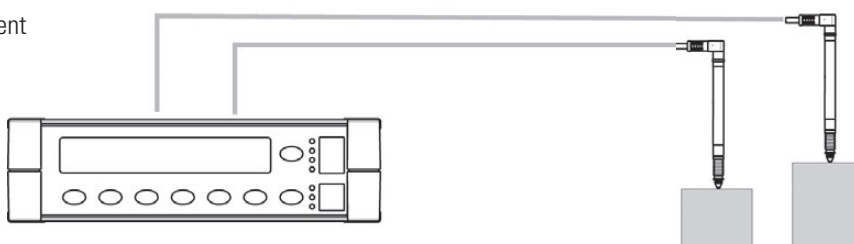
Diameter = 1+2



Difference = 1-2



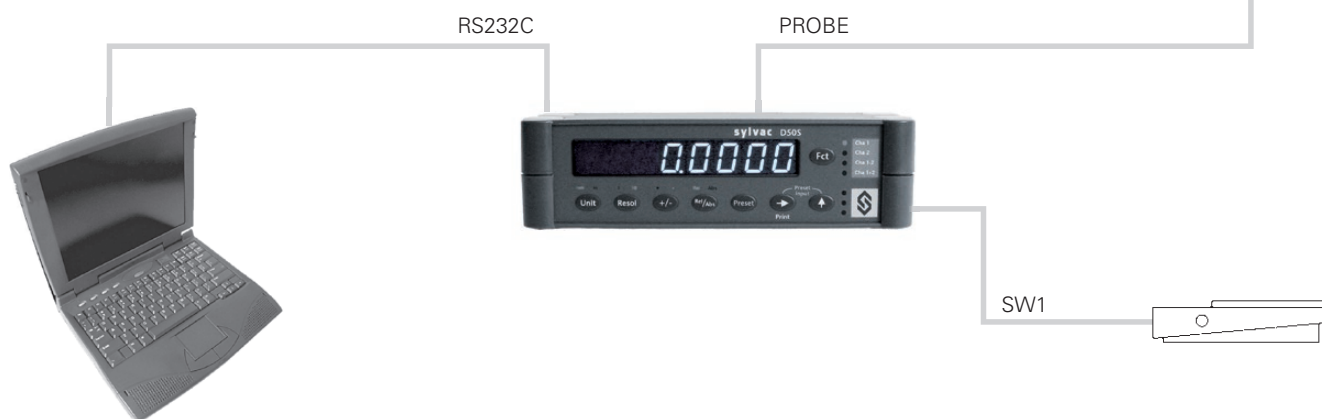
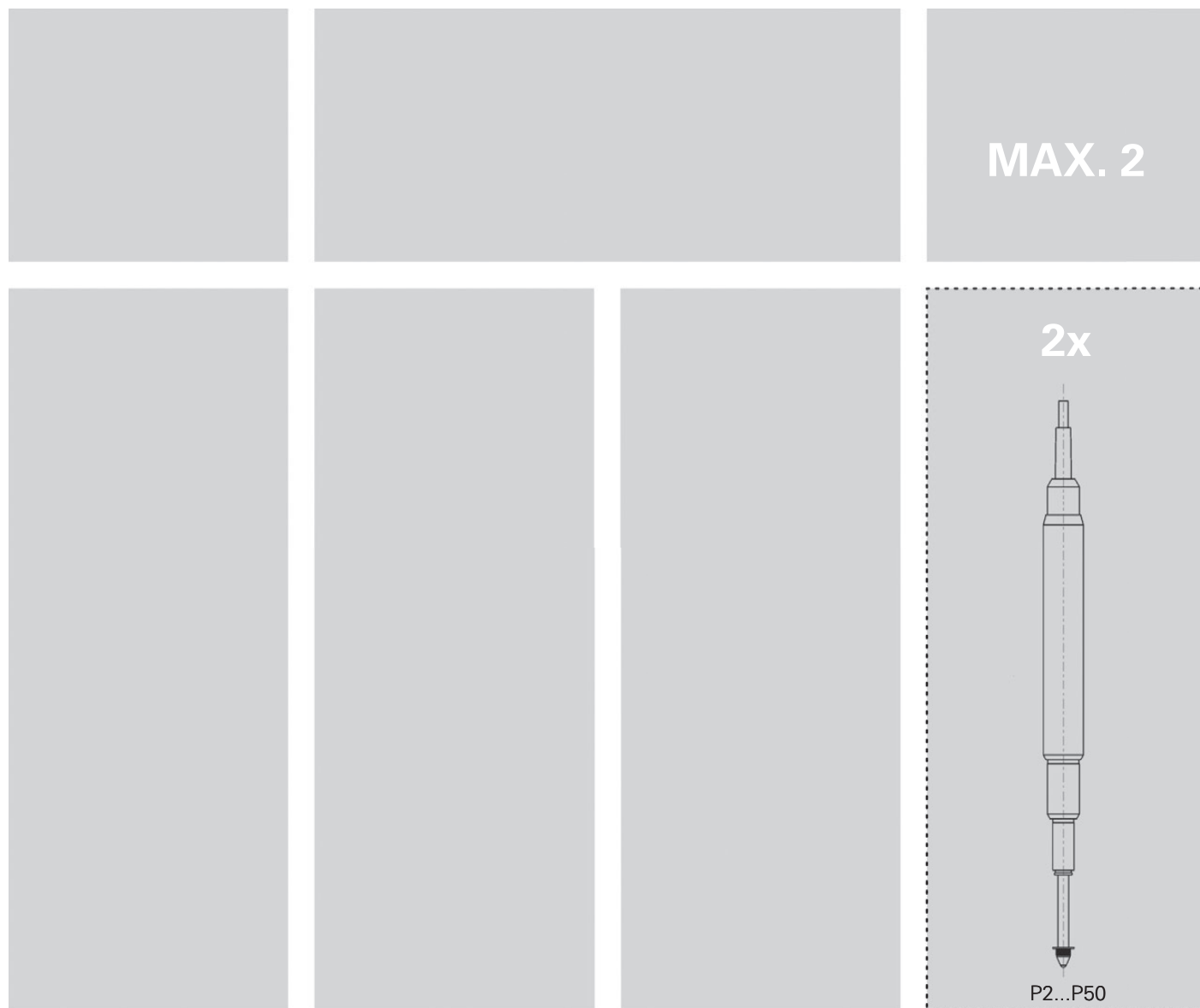
Individual measurement



Digital display

S_View D50S

POSSIBILITIES OF CONNECTION

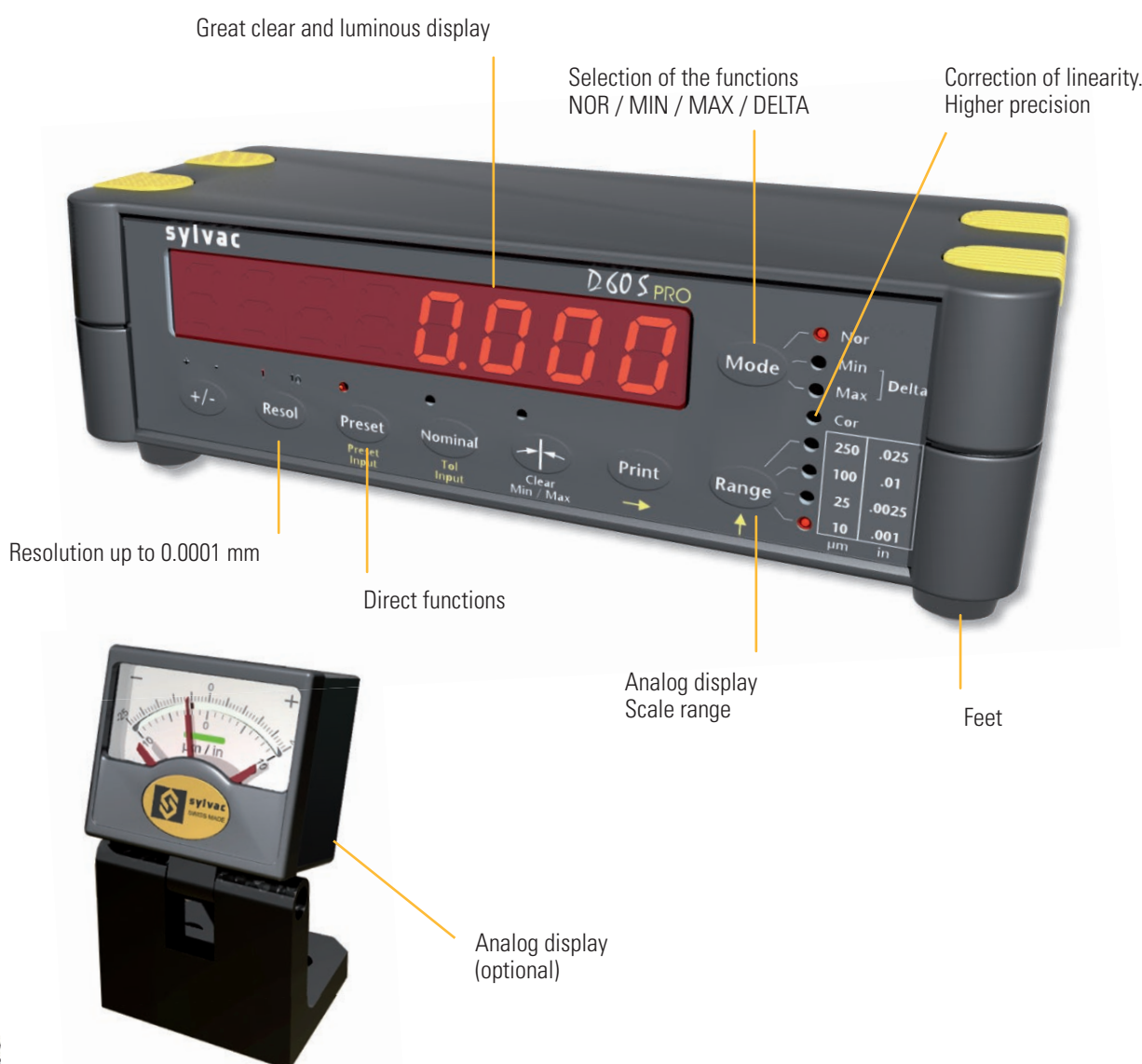


Digital display

S_View D60S PRO

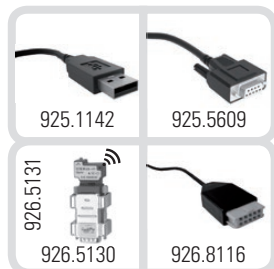
DESCRIPTION

- Digital display with 1 input for probe and 1 output for analog unit
- Data output RS232C
- Power supply by external unit
- Light and compact
- Ease of use
- Correction of linearity on probe channel



SWISS
MADE

RS232



mini-USB

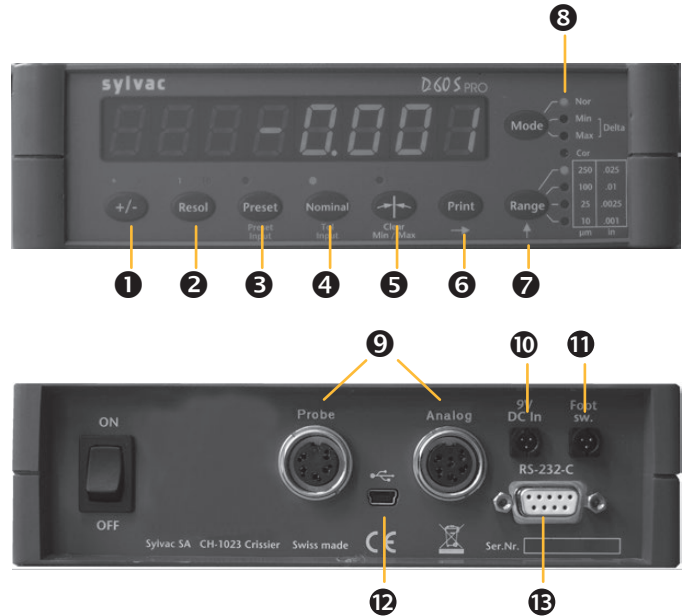


Digital display

S_View D60S PRO

DISPLAY

- 1 Selection of measuring direction
- 2 Selection of resolution
- 3 Preset function / Preset setting
- 4 Nominal and tolerances setting
- 5 Zero setting to analog display or Min-Max
- 6 Data transmission
- 7 Tolerances range for analog display
- 8 Probe measuring mode: NOR (static) / MIN / MAX / DELTA
- 9 Probe input / Analog input
- 10 Power supply connection
- 11 External contact connection
- 12 USB-mini
- 13 RS232 input / output



TECHNICAL SPECIFICATIONS

| | | 804.1070 |
|-----------------------------------|----|---|
| Type | | D60S PRO |
| Max. Error | µm | P2 : 0.5 / P5 : 0.6 / P10 : 0.6 / P25 : 0.8 / P50 : 1.5 |
| Repeatability | µm | P2 : 0.2 / P5 : 0.2 / P10 : 0.2 / P25 : 0.2 / P50 : 0.4 |
| Sizes | mm | Display unit: 180 x 75 x 50 Analog unit : 50 x 48.5 x 41.5 |
| Weight | kg | 0.3 |
| Case | | Terlend plastic |
| Protection according to IEC 60529 | | IP40 |
| S_Connect | | RS232 / USB mini ¹⁾ |
| Programmable by PC | | ● |

BASIC INSTRUMENT

- Unit according to technical specifications
- Feet (pair)
- Charging unit according to country (904.4000)
- Instruction manual

Digital display

S_View D60S PRO

APPLICATIONS



Measuring stand with P2B, D60S PRO and analog display

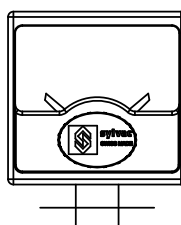


PS17 bench with D60S PRO and analog display

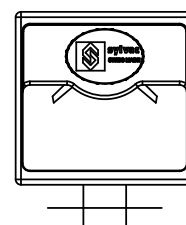
ANALOG UNIT



804.1071



804.1072

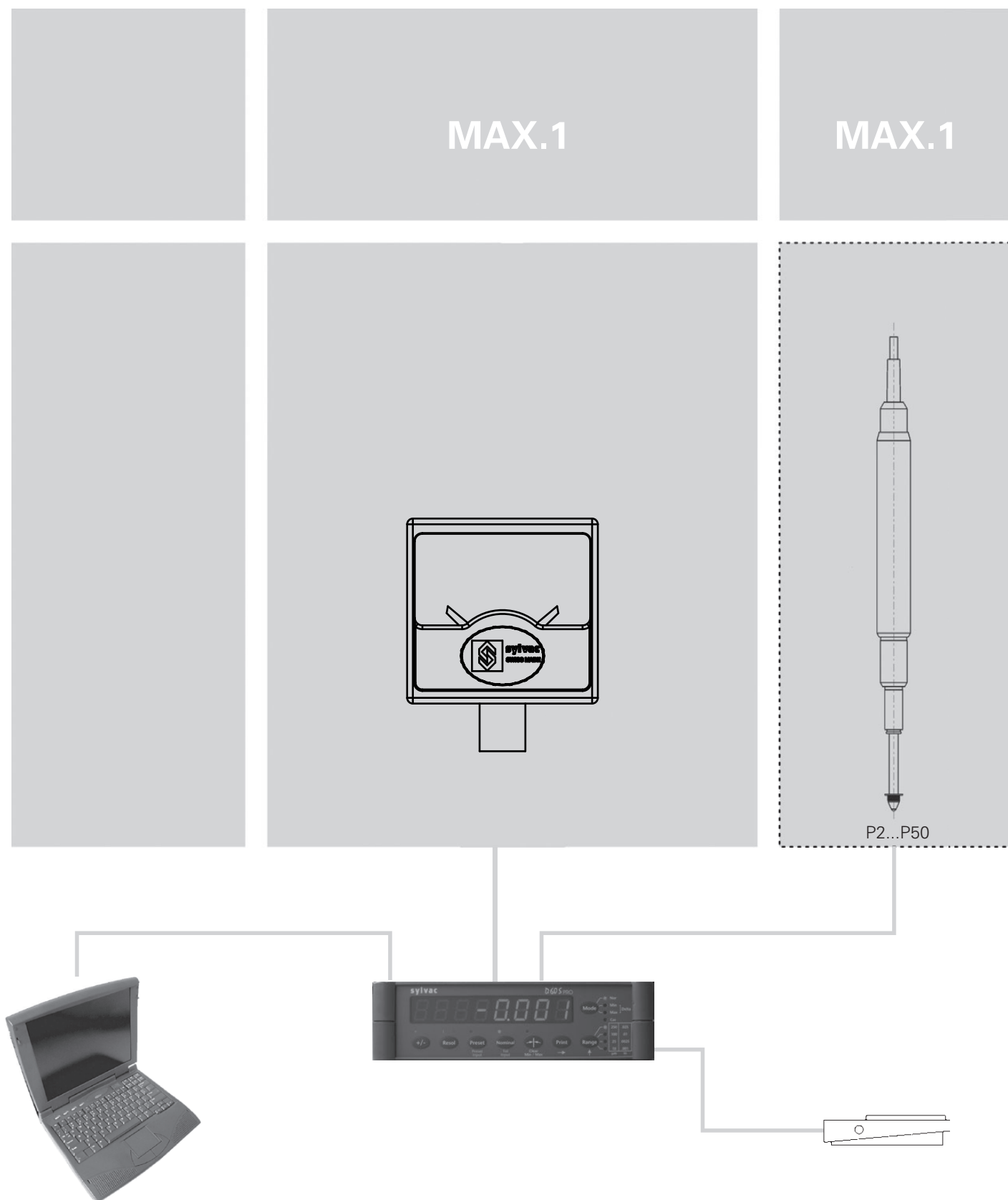


| | 804.1071 | 804.1072 |
|-----------------------------------|--------------------------|---------------------------|
| Model | Needle axis at 6 o'clock | Needle axis at 12 o'clock |
| Overall dimensions | 50 x 48.4 x 41.5 | |
| Case | Aluminium | |
| Protection according to IEC 60529 | IP40 | |

Digital display

S_View D60S PRO

POSSIBILITIES OF CONNECTION



Digital display

S_View D80S

DESCRIPTION

- Digital unit with 1 probe input (8 channels)
- Resolution up to 0.0001 mm
- Data output RS232C
- Opto-coupled output (command signals)
- Command for pneumatic lifting unit
- Selection of measuring direction
- Possibility of increasing the precision by calibrating the unit with the probe
- Powered by charging unit

CCFL graphic display
with backlight

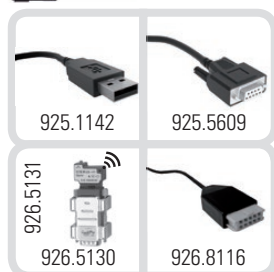


Ergonomic keyboard

Adjustable base

SWISS
MADE

RS232



Digital display

S_View D80S

DISPLAY/SOFTWARE

- 1 Activation of analog display
- 2 Selection of unit mm/inch
- 3 Selection of resolution
- 4 Tolerance indicators with LED
- 5 PRESET function
- 6 Display Min/Max/Delta
- 7 Data sending
- 8 Zero setting
- 9 Configuration channel
- 10 RS232 input/output
- 11 Analog and digital Opto-coupled output
- 12 External power supply connection
- 13 Capacitive probe input
- 14 Connection D102/D108 unit
- 15 External contact connection



TECHNICAL SPECIFICATIONS

| | | 804.1080 |
|--|----|---|
| Type | | D80S |
| Max. Error | μm | P2 : 1.5 / P5 : 1.6 / P10 : 1.6 / P25 : 1.9 / P50 : 3.9 |
| Max. Error ¹⁾ | μm | P2 : 0.5 / P5 : 0.6 / P10 : 0.6 / P25 : 0.8 / P50 : 1.5 |
| Repeatability | μm | P2 : 0.2 / P5 : 0.2 / P10 : 0.2 / P25 : 0.2 / P50 : 0.4 |
| Sizes | mm | 227 x 77 x 132 |
| Weight | kg | 0.8 |
| Case | | Terlend Plastic |
| Protection rating according to IEC 60529 | | IP50 |
| S_Connect | | RS232 ²⁾ |
| Programmable by PC | | • |

¹⁾ Probe and unit calibrated

²⁾ see cables chapter

Digital display

S_View D80S

BASIC INSTRUMENT

- Unit according to technical specifications
- Base
- External contact (foot-pedal)
- Charging unit according to country (904.4000)
- Instruction manual

APPLICATIONS



Measurement of 4 dimensions on 4 channels with one single probe

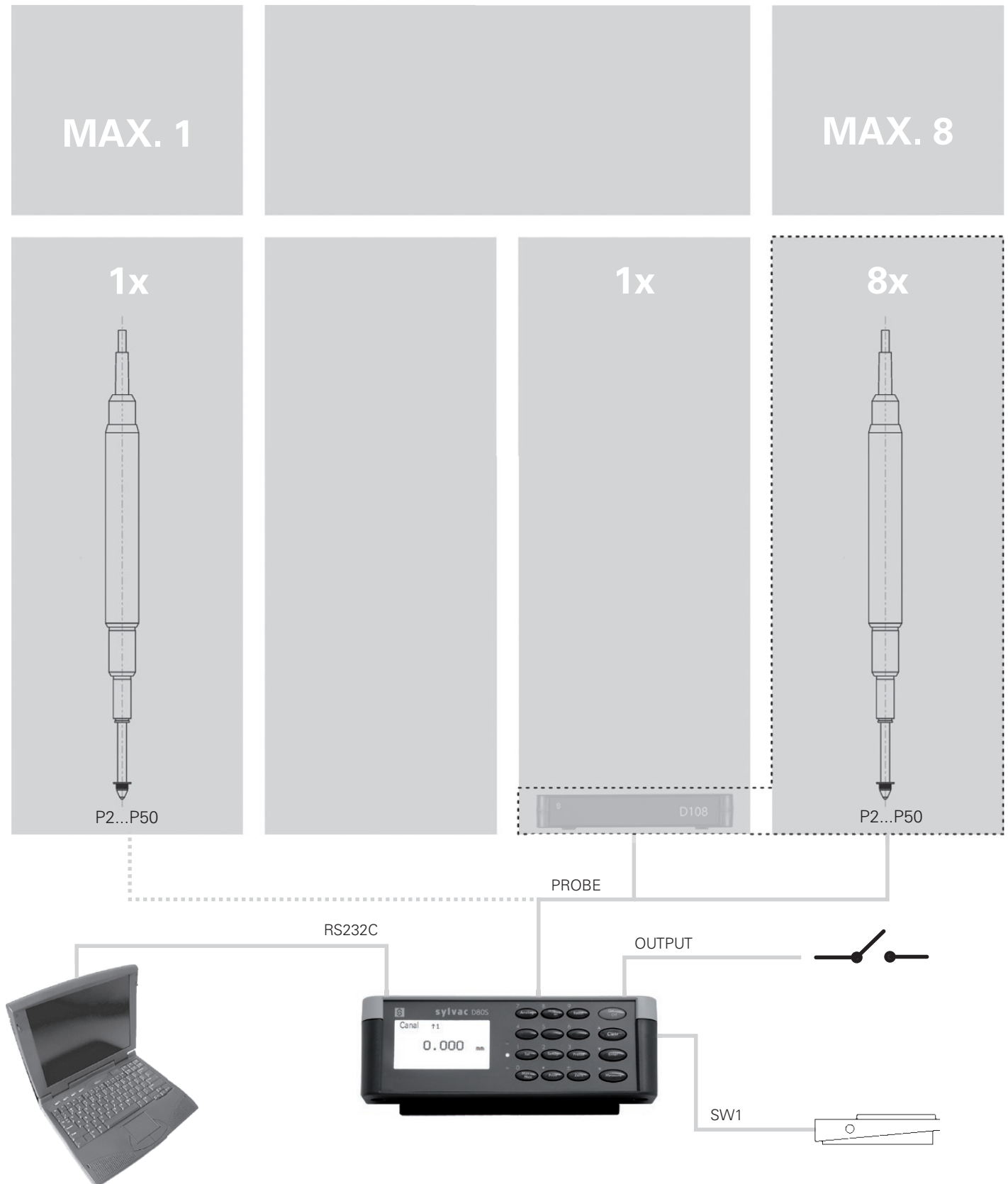


Using 3 measuring channels with 3 separated probes

Digital display

S_View D80S

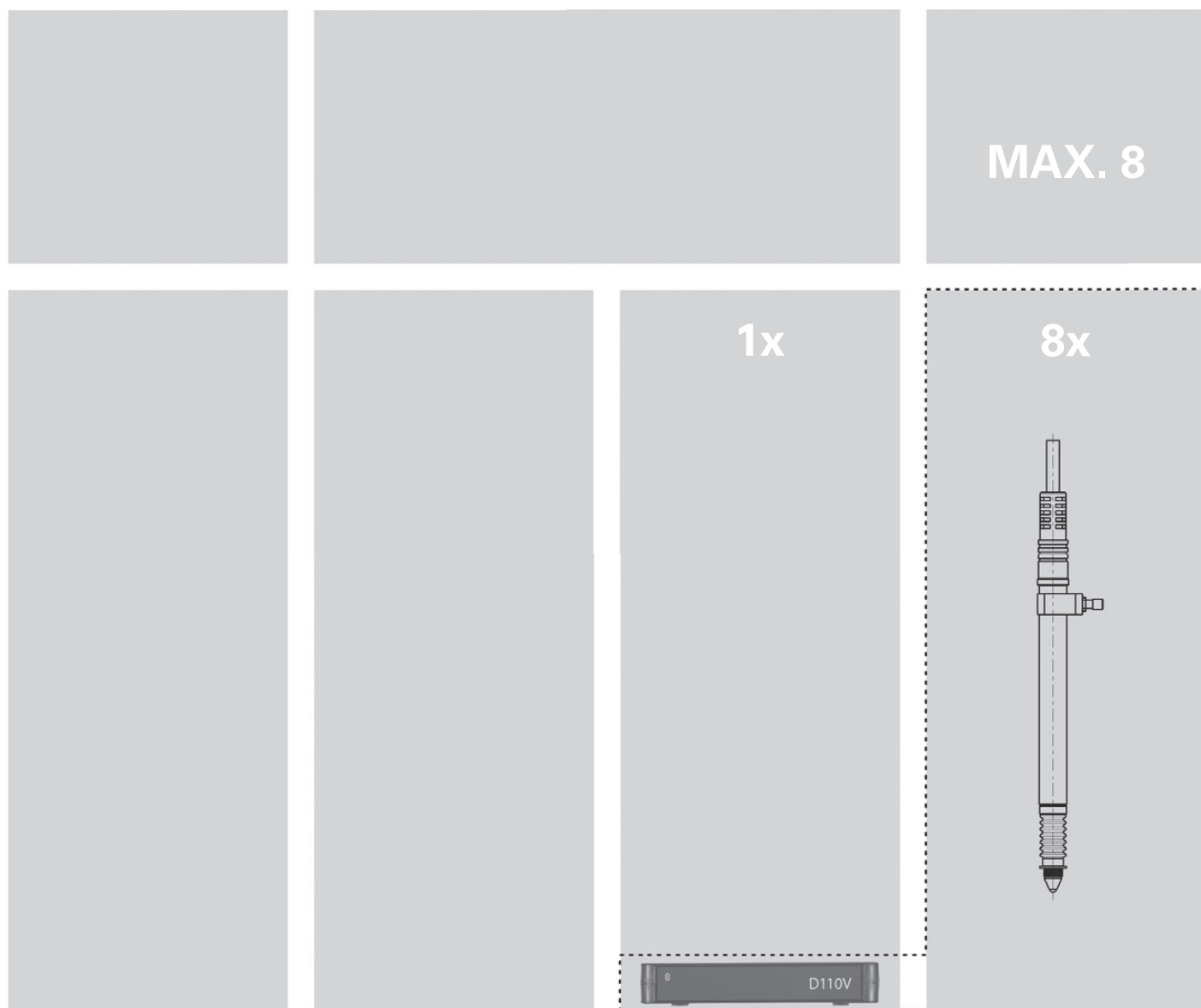
CONNECTION DIAGRAM



Digital display

S_View D80S

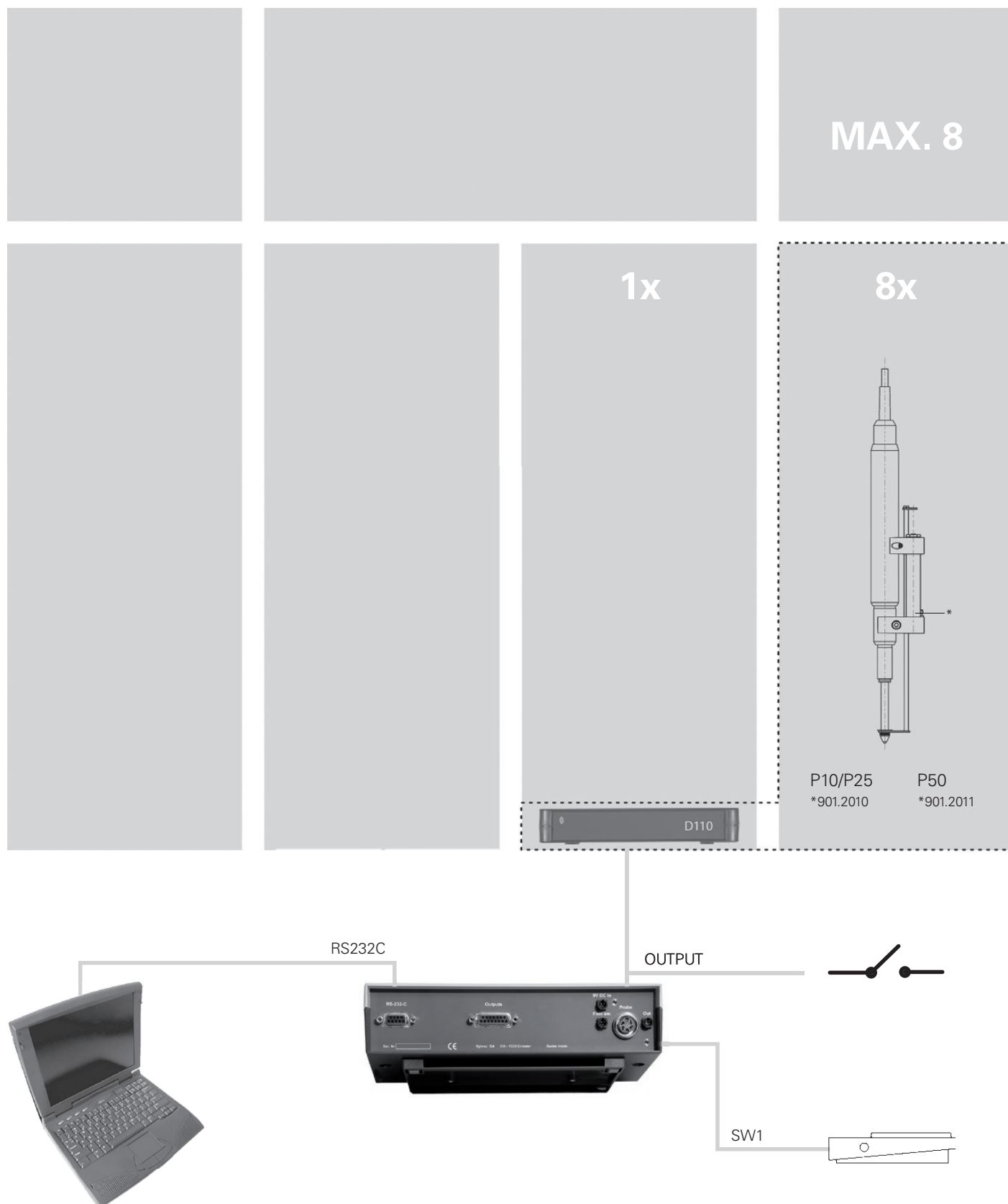
POSSIBILITIES OF D110V LIFTER



Digital display

S_View D80S


POSSIBILITIES OF D110 LIFTER



Digital display

S_View D300S

DESCRIPTION

- Digital display with 8.5" touchscreen
- Without, 2 or 4 Sylvac probe inputs
- 6 USB inputs for Sylvac instruments
- Automatic detection of connected instruments
- Linearity correction on 25 points (for each channel)
- Software able to treat up to 62 instruments simultaneously
- Memorizing of setups and values
- RJ-45 Ethernet connector
- General or individual Preset
- Math functions for each channel
- Numeric, analog and statistic display
- Compatible with  **Bluetooth** instruments (USB dongle is required)

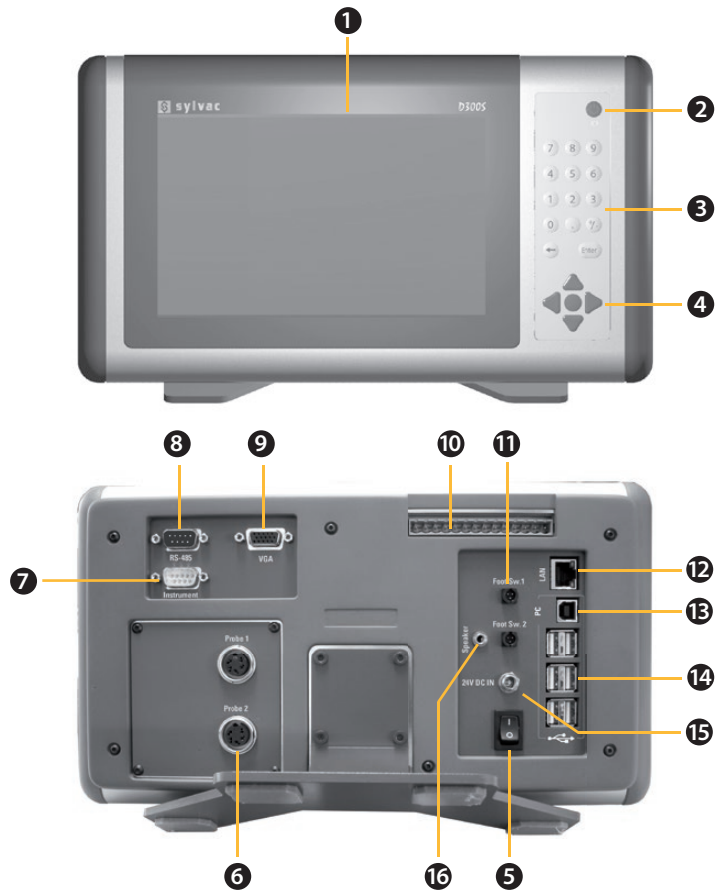


Digital display

S_View D300S

INTERFACE | HARDWARE

- 1 Touchscreen 8.5 "
- 2 ON/OFF button for LCD
- 3 Numeric keyboard
- 4 Navigation keyboard
- 5 ON/OFF switch
- 6 Capacitive probes inputs
- 7 RS-232 instrument input
- 8 RS-485 input
- 9 VGA output
- 10 Opto-coupled digital output
- 11 2 inputs for external contacts
- 12 RJ-45 Ethernet
- 13 USB Device connector
- 14 6 USB Host inputs
- 15 24VDC connector
- 16 Audio jack connector



TECHNICAL SPECIFICATIONS

| | 804.1300 | 804.1320 | 804.1310 |
|--|---|------------------|----------|
| Model | D300S-2 | D300S-4 | D300S |
| Inputs * | 2 probes / 6 USB | 4 probes / 6 USB | 6 USB |
| Max error μm | P2 : 1.5 / P5 : 1.6 / P10 : 1.6 / P25 : 1.9 / P50 : 3.9 | | --- |
| Max. Error ¹⁾ μm | P2 : 0.5 / P5 : 0.6 / P10 : 0.6 / P25 : 0.8 / P50 : 1.5 | | --- |
| Repeatability μm | P2 : 0.2 / P5 : 0.2 / P10 : 0.2 / P25 : 0.2 / P50 : 0.4 | | --- |
| Frequency of measure meas/sec | P2 : 5 / P5 : 5 / P10 : 5 / P25 : 5 / P50 : 2.5 | | --- |
| Overall dimensions mm | 330 x 175 x 77 | | |
| Weight kg | 3.3 | | |
| Case | Steel / Plastic | | |
| Protection rating according to IEC 60529 | IP40 | | |
| S_Connect | RS232 / USB | | |
| Programmable by PC | ● | | |

¹⁾ Probe and unit calibrated

^{*)} Extendable to 32 probes and 30 USB instruments (see page 129-131)

Digital display

S_View D300S

BASIC INSTRUMENT

- Unit according to technical specifications
- Table base
- External contact (foot-pedal)
- Charging unit according to country (804.4000)
- Instruction manual

APPLICATIONS



Many instruments connected to the D300S with live displayed colored values to indicate the tolerances



Multi-gauging measurement using D200S interface and D300S display

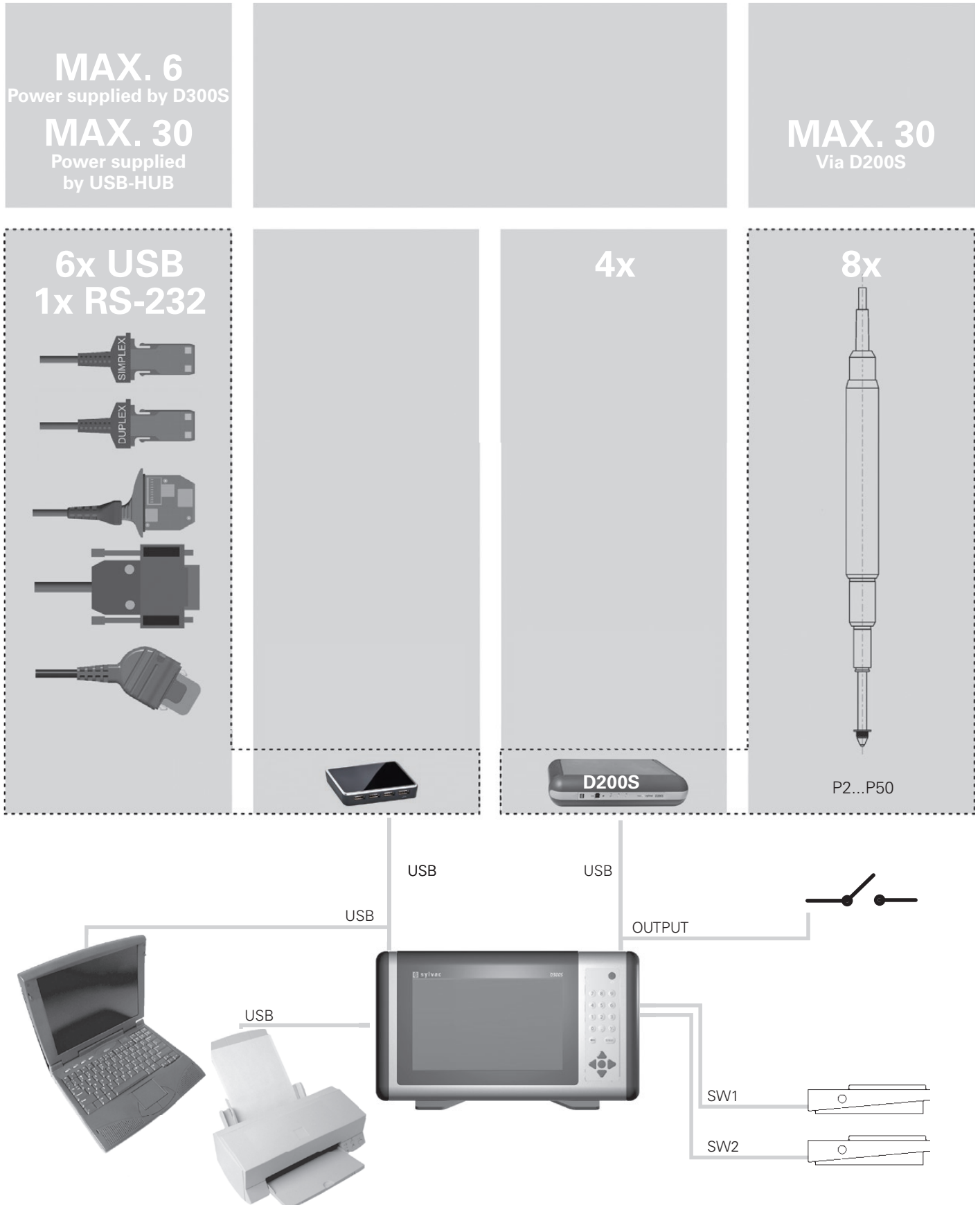


Measurement using PS17 bench
Automatic detection of measuring channel and automatic switch to the right window

Digital display

S_View D300S

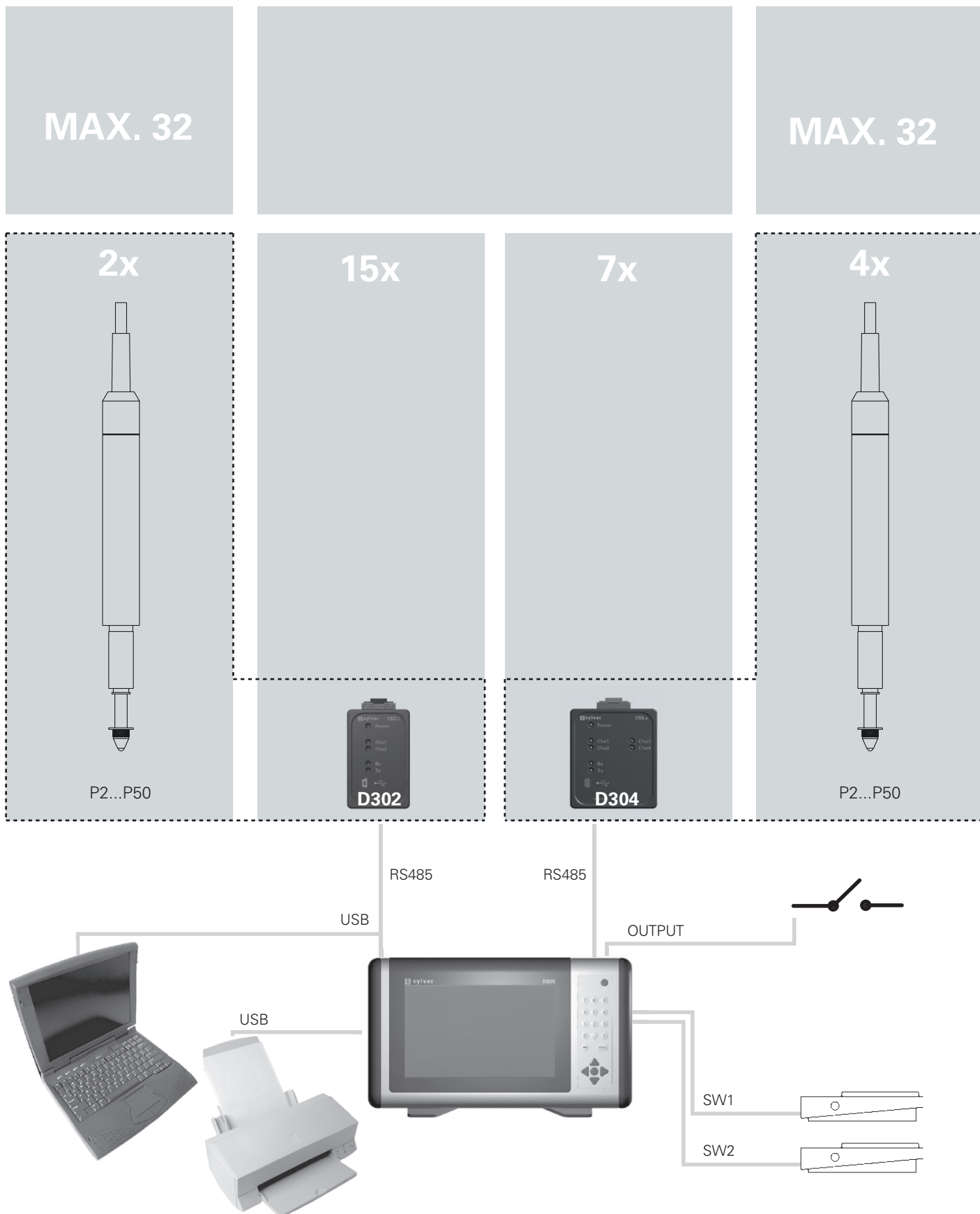
POSSIBILITIES OF CONNECTION WITH ACCESSORIES



Digital display

S_View D300S

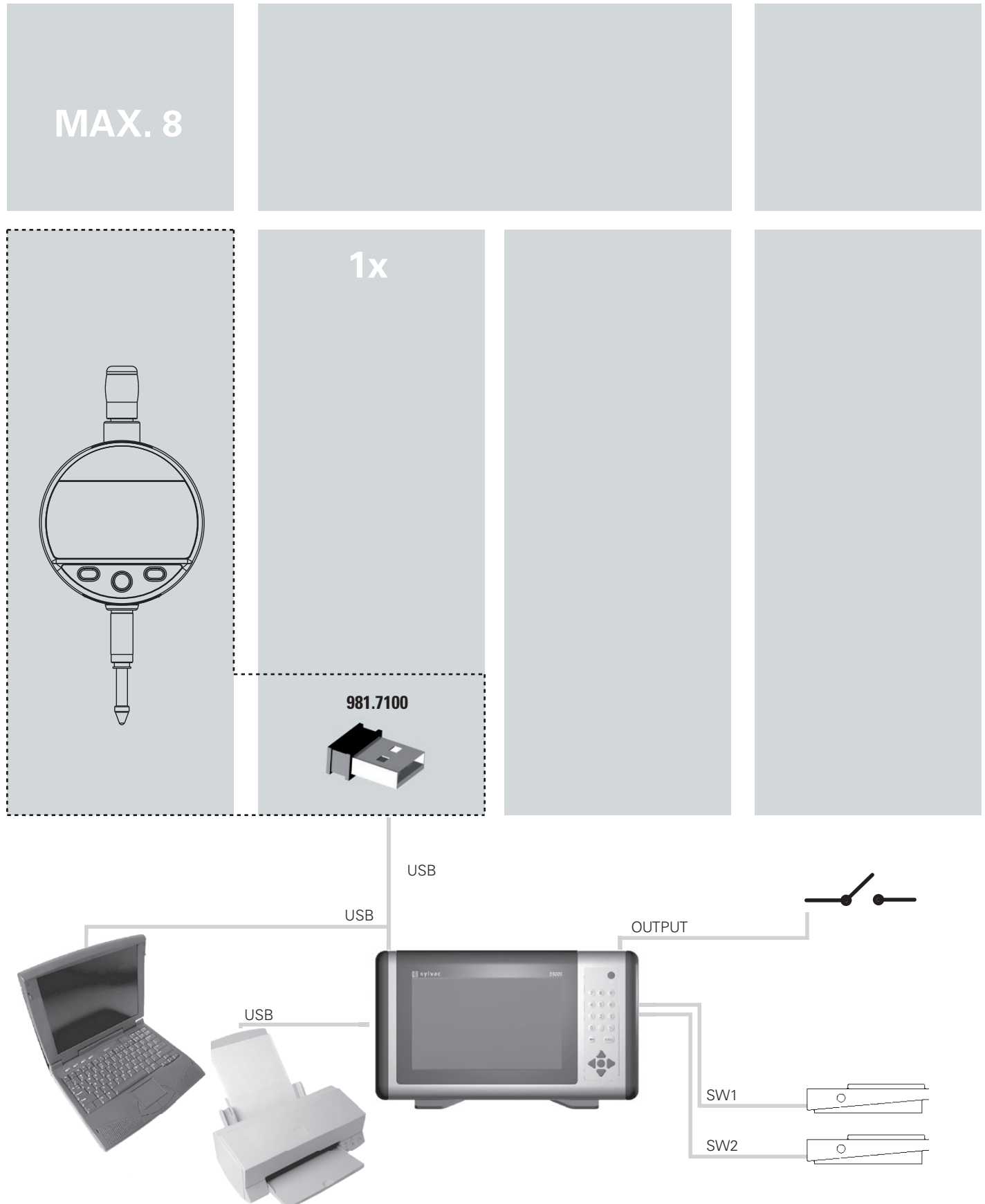
POSSIBILITIES OF CONNECTION WITH ACCESSORIES



Digital display

S_View D300S

POSSIBILITIES OF CONNECTION WITH ACCESSORIES

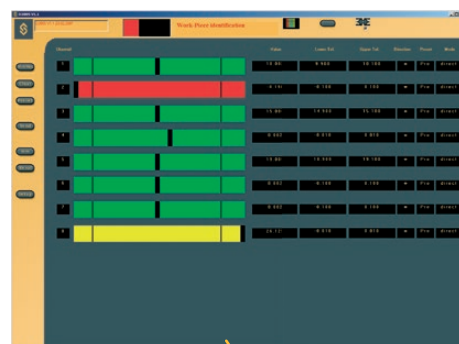


Multiplexer unit

S_View D200S

DESCRIPTION

- Multiplexer with 8 inputs (for Sylvac probes P2 to P50)
- Dynamic measurement (200 mes/s)
- Ideal for the layout conception of multi-gauging
- Command for pneumatic lifting unit
- Software allowing the treatment of up to 24 channels simultaneously (bargraph)
- Sending of the measured values into Excel, notepad or in specific files
- Creation of sequences for sending data
- Mathematic combinations between channels
- Standalone use possible



8 inputs for Sylvac probes

Software allowing the treatment of up to 24 channels simultaneously (bargraph)

Tolerance indicators

Connection by USB (2x) or RS232 (1x)

Opto-coupled digital output rack

Connection by USB (2x) or RS232 (1x)

SWISS
MADE

USB



Multiplexer unit

S_View D200S

DISPLAY/SOFTWARE

Selection of unit mm/inch

Selection of resolution

PRESET function

Sending Data

Tolerance indicators with LED

Min/Max/Delta display

Individual selection of measuring direction

Switchable digital/bargraph display

Global tolerance status of the measured part

Programming channels screen

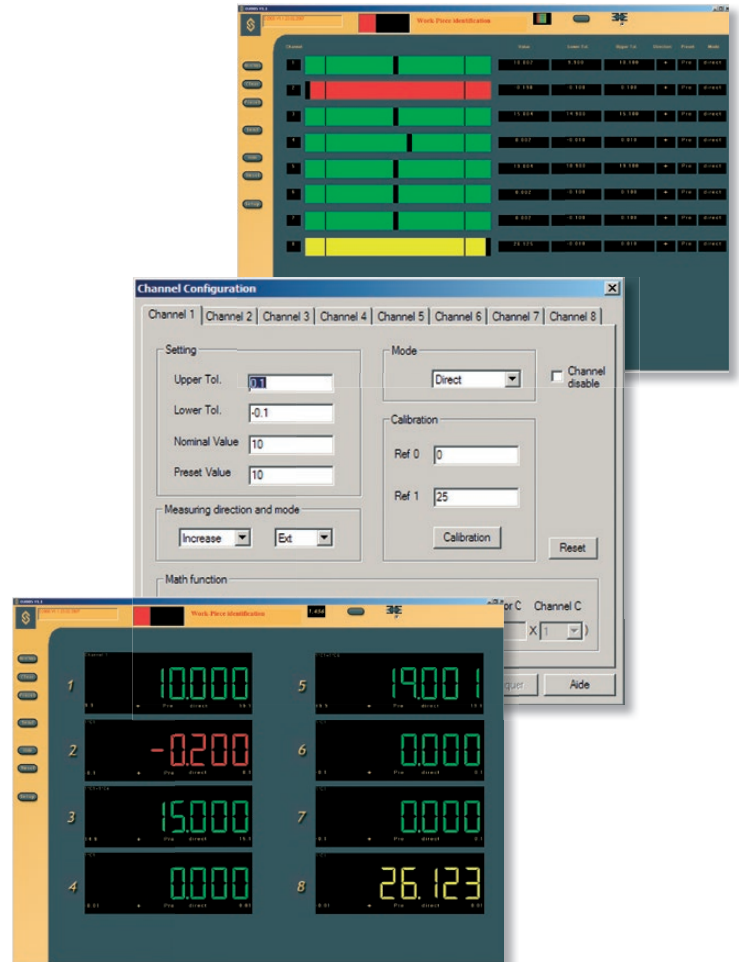
Sending Sequences of Data

External contact configuration

Electrical external contact configuration

Open / Save configurations

Transfer configuration to D200S unit



TECHNICAL SPECIFICATIONS

| 804.1200 | | |
|--|----|--|
| Type | | D200S |
| Max. Error | μm | P2 : 1.5 / P5 : 1.6 / P10 : 1.6 / P25 : 1.9 / P50 : 3.9 |
| Repeatability | μm | P2 : 0.2 / P5 : 0.2 / P10 : 0.2 / P25 : 0.2 / P50 : 0.4 |
| Frequency of measurement | | 200 values /second |
| Sizes | mm | 304 x 171 x 61 |
| Weight | kg | 1.2 |
| Case | | Aluminium profile, Terlend plastic, ABS and aluminium vanished |
| Protection rating according to IEC 60529 | | IP50 |
| S_Connect | | USB / RS232 ¹⁾ |
| Programmable by PC | | ● |

¹⁾ see cables chapter

Multiplexer unit

S_View D200S

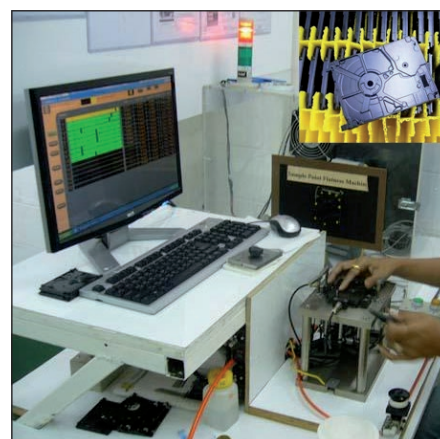
BASIC INSTRUMENT

- Instrument according to technical specifications
- Feet for use in vertical position
- Charging unit according to country (904.4000)
- PC Connection cable type USB (804.1210)
- CD with D200S software
- Instruction manual

APPLICATIONS



Dynamic measurement of several diameters, (OD and ID) of a shaft

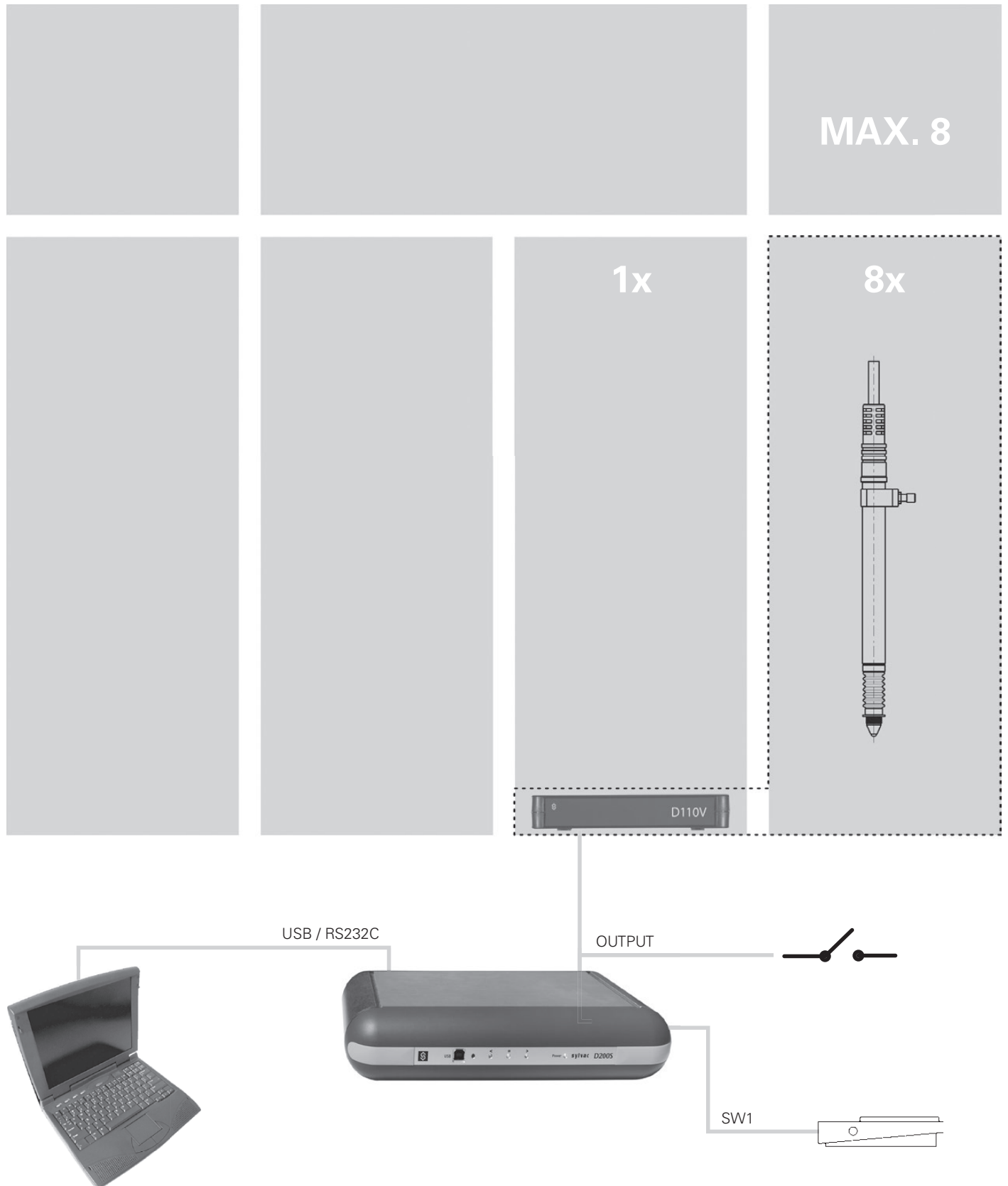


Multi-gauging application

Multiplexer unit

S_View D200S

POSSIBILITIES OF D110V PNEUMATIC LIFTER



Multiplexer unit

S_View D200S

POSSIBILITIES OF CONNECTION

MAX. 8

8x



P2...P50

MAX. 8

8x



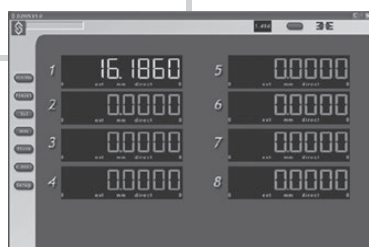
P2...P50

MAX. 8

8x



P2...P50



Multiplexer unit

D302 / D304

DESCRIPTION

- Multiplexing unit with 2 or 4 inputs for Sylvac probes P2 à P50
- Dynamic measurement (10 à 20 meas./Sec. according to resolution)
- Perfect solution for multi-gauging system
- Analog output for PLC connection
- Standalone use possible



RS-485



USB mini

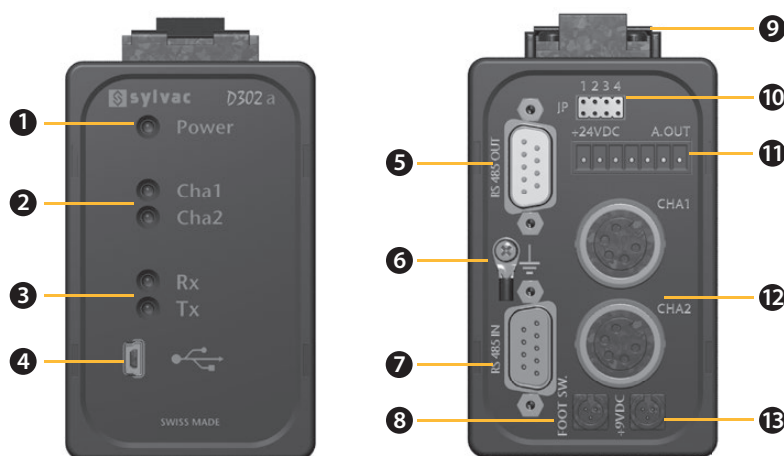


Multiplexer unit

D302 / D304

HARDWARE DESCRIPTION

- 1 LED Power
- 2 LED channel
- 3 LED RS 485 activity
- 4 USB port for PC connection
- 5 RS 485 output
- 6 Ground connector
- 7 RS 485 input
- 8 External connector
- 9 Standard clamping (DIN 35mm)
- 10 Jumpers
- 11 Analog output / 24 VDC (only version a)
- 12 Probes input
- 13 9V power supply input



TECHNICAL SPECIFICATIONS

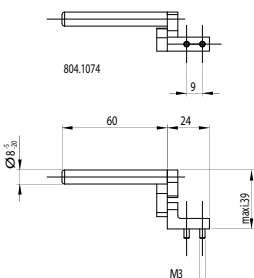
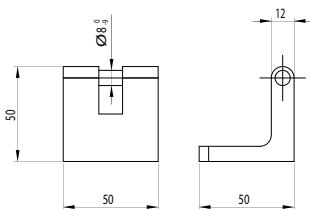
| | | 804.1302 | 804.1303 | 804.1304 | 804.1305 |
|--|----|---|---------------|--------------|---------------|
| Modele | | D302 | D302a | D304 | D304a |
| Max error | µm | P2 : 1.5 / P5 : 1.6 / P10 : 1.6 / P25 : 1.9 / P50 : 3.9 | | | |
| Max. Error ¹⁾ | µm | P2 : 0.5 / P5 : 0.6 / P10 : 0.6 / P25 : 0.8 / P50 : 1.5 | | | |
| Repeatability | µm | P2 : 0.2 / P5 : 0.2 / P10 : 0.2 / P25 : 0.2 / P50 : 0.4 | | | |
| Overall dimensions | mm | 95 x 88 x 55 | | 95 x 88 x 77 | |
| Weight | kg | 0.3 | | | |
| Case | | Aluminium profil / plastic TA 6 | | | |
| Protection rating according to IEC 60529 | | IP40 | | | |
| S_Connect | | USB / RS 485 | | | |
| Programmable by PC | | ● | | | |
| Analog output signal | | | -10V ... +10V | | -10V ... +10V |

BASIC INSTRUMENT

- Unit according to technical specifications
- Feet (pair)
- RS232/RS485 cable
- Charging unit according to country (904.4000)
- Instruction manual

Display units

ACCESSORIES



| | | D50S | D60S | D80S | D200S | D300S | D302 D304 |
|-----------------|---|------|------|------|-------|-------|--------------|
| 904.1108 | D108-additional 8 input unit for probes | | | • | | | |
| 904.1112 | D110V-control unit with 16 vacuum outputs | | | • | • | • | |
| 904.4000 | Charging set 100-240V / 9V | • | • | • | • | | • |
| 904.4001 | EUR cable included in 904.4000 | • | • | • | • | | • |
| 904.4002 | UK cable included in 904.4000 | • | • | • | • | | • |
| 904.4003 | USA/JPN cable included in 904.4000 | • | • | • | • | | • |
| 804.4000 | Charging set 100-240V / 24V | | | | | • | |
| 904.4001 | EUR cable included in 804.4000 | | | | | • | |
| 904.4002 | UK cable included in 804.4000 | | | | | • | |
| 904.4003 | USA/JPN cable included in 804.4000 | | | | | • | |
| 904.4101 | External contact (footpedal) | • | • | • | • | • | • |
| 904.6001 | Dust cover | | | • | | | |
| 804.6001 | Dust cover | | | | | • | |
| 804.1211 | Connection cable D200S - D110/V | | | | • | | |
| 804.1073 | Table stand for D60S analog display 804.1071 and 804.1072 | | • | | | | |
| 804.1074 | Arm to fix D60S analog display on PS17 bench | | • | | | | |